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Family Farming in the Albanian Mountainous Areas: Local Agro Pastoral Farming Systems and Market Integration Perspectives

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The objectives of this paper are to understand the evolution of family farming in a mountainous area of Southern Albania after the fall of communism in 1991 and to identify the socio-economic developments that characterize this territory in very last years. According to primary or secondary historical data, there is a recent increasing demand for dairy and meat products due to the rapid growth of urban markets. This has pushed for an increase in livestock production. Simultaneously new moving breeders from southern Albania are renting vast good pastures and the management reform of public pastures have put more pressure on common pastures. At the end, the paper discusses the perspectives of improving livestock farming systems in that context.

Key words: family farming, livestock systems, mountainous area, Albania

1. Introduction

Albania is a Balkan country located in the Mediterranean part of Europe but a potential candidate country to enter the European Union. This country was communist until 1991, when the transition into a market economy began. The agrarian reform and this transition have led to the deconstruction of the old economic regime which was characterized by state planning and centralized productive resource management (652 farm units with an average of 1,050 ha per unit). Today, according to MAFCP (2014) around 352,315 farm households still have a high level of land fragmentation (1.16 ha/farm with an average of 4.8 parcels). According to the FAO definition of family farming a family farm is managed and operated by a family and relies predominantly on family labor, including both women's and men's. According to MAFCP (2014) a small farm is managed by a family, relies predominantly on family labor and is characterized by a small area of arable land, lower or equal to the national average (1.16 ha/ land area per farm) as well as a high level of land fragmentation. The agricultural sector is strongly centered on family farming. More than 90 percent of the 352,315 farms in Albania are below 2 hectares and account for about 95 percent of the land used, being the only country in Europe to rely largely on extensive small-scale domestic production (MAFCP, 2014). According to Cochet (2011) the farming system is an operating mode using the current

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natural, technical, and socio-economic factors, closely related to the evolution history of a given territory. The agrarian reforms towards a market economy have pushed farmers to change their farming systems adapting their production to market demand.

Major changes in the agricultural sector have led to an increase in livestock production, which provides about 57% of the total value of agri-food production, followed by the arable crops with 26% and fruit production with 17% (MAFCP, 2014). At the national level this increase is more accentuated during the period 2012-2014 when small ruminants increased by 22%.

The dairy industry holds an important place in the Albanian agri-food sector (MAFCP, 2014). According to official statistics, domestic production of milk reached 1,1 million tons in 2012 marking an increase of 9% since 2007.

Regarding mountainous areas, between 1991 and 2014, the population migrated massively to the lowlands or abroad. The farming systems have deeply changed but without significant land concentration phenomena.

The natural landscapes and typical Mediterranean pastures mainly explain the predominance of small ruminants in the mountainous area of Albania. As farm size is very small and the alpine pastures quite rich, family livestock farming is one of the main sources of family income in these territories. It is therefore considered as a key resource for local development (Bernard *et al*., 2014; Garnier, 2013). Yet, the long economic transition and demographic fall (Lerin & Marku, 2010) have nowadays created a binding context to trigger local economic development dynamics.

Albania is organized in 15 regions, which are divided in 36 districts. There are overall 309 rural municipalities and 2,980 villages which are the smallest administrative units in the country.

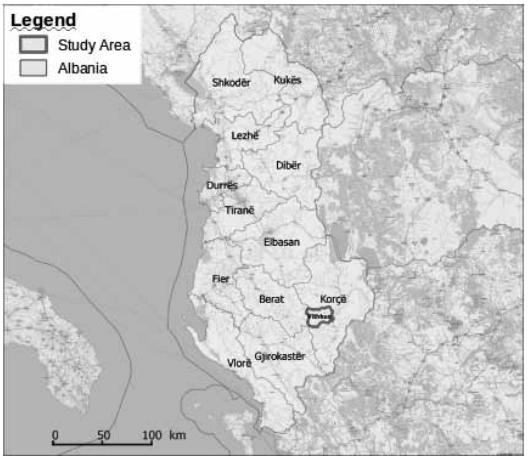

Fig 1. The municipality of Vithkuq
Source: Elaboration on GIS by Florjan Bombaj

Our study area is located in the region of Korca, which is one of the most developed economic regions in southeastern Albania. For this region, the development of the urban area of the city of Korca and the agricultural development of the plain surrounding the city take a much more important place than the mountainous area of our study area. This concerns the selected municipality of Vithkuq (see figure 1) which has a long agro-pastoral tradition. The recent evolution of this municipality is very similar to the one of the country: along with to the demographic desertification of the municipality after the fall of communism, data show a sharp increase in herd size, new dynamics in terms of modernization of the local dairies and issues in natural resources use (Çili *et al*. 2013).

2. Research context and questions

In the mountain areas, changes and unsteadiness caused by depopulation and globalization impact local economies and societies. According to Wymann von Dach *et al*. (2013), these changes contribute to higher pressure on local resources (Peeters, 2009), unsustainable practices in land use,

disintegration of local customs and traditions, and increased vulnerability to global change.

Farming activity in mountainous areas is mainly family-based (Crowley, 2013; Varotto & Lodatti, 2014; Wymann von Dach *et al*. 2013). Family farming in its various forms around the world reflects the heterogeneity of economies and societies (Thirion *et al*. 2015).

According to Manoli *et al*. (2011) understanding the diversity of production systems in a given territory is key for analyzing the territory as a space where society and institutions interact locally

A farming system deals with two important issues: a) natural resource management; b) market integration perspectives. Since livestock production is dominant in mountain areas, their analysis in terms of natural resource management and market integration is crucial.

The principal activity of all farmers in Vithkuq is livestock production; therefore they are all breeders. The management of mountain pastures and resource use access affect the farming systems of these breeders (Bombaj *et al*. 2015; Çili *et al*. 2013).

The paper aims to discuss two hypotheses: First: after the collectivization period, the local agro pastoral farming systems have gradually adapted to the new political and economic context. Some groups of family farmers have increased their herds causing some changes in the management and in the intensity of the use of pastures. In consequence the lack of specific policies has harmed natural resource management.

Second: the lack of public support has led to a weak development of the milk and meat value chain.

Based on fieldwork in the municipality of Vithkuq this paper aims to respond to the following research questions: a) what is the evolution of the family farming model and the specificities of the local agro pastoral farming system in the territories under consideration after the fall of communism in 1991? b) Which are the market integration perspectives of the local livestock production and the pastoral resource management issues?

3. Methodological approach

Given the extent of the area (with a surface of 243 km^2) and the difficulty of access to some very remote villages, we have chosen a limited number of communities. We studied 3 communities in 3 spatial organizational units, crossing an area of milk collection where the dairies are located with an area of their related summer pastures (see table 3 and 4).

Combining secondary data (statistics and documents) and primary data (interviews with local actors and specialists), the final delimitation of the 3 units selected for our research was done according to the number of families in each village, the number of animals, and the proximity and ties to the identified dairies. An important criterion was also the significance of traditions and sources available on the history of the village, and the official written sources on the evolution of the population and livestock production. The sampling for interviews was done with consideration to a balance between large and specialized farmers, medium-sized farmers and very small subsistence farmers according to their respective importance of their pasture use.

The purpose of the sampling was to investigate different breeders with different experiences and perspectives, different strategies and their different relationships to resource use helping us understand the pastoral system. Using this approach, it was possible to get a global and detailed description of the farming system and its specificities in the considered municipality.

Our approach was conducted in four steps:

-1. Analysis of the national and local farming system development dynamics. At the national level we used several documents, including reports, papers and other data. At the local level we studied the municipality of Vithkuq.

-2. Characterization of the whole reference population of breeders. The interviewed breeders were described by age, herd size, herd type (cattle/ sheep/goat), according to an existing database of the Albanian Ministry of Agriculture and the European project "PAZA". (The "improving consumer protection against zoonotic disease – Albania"). This project[1] aims to promote the sustainable control of zoonotic diseases and strengthen institutional and administrative capacity.

-3. Fieldwork phase based on semi-structured interviews with key informants, questionnaires addressed to producers, personal field observations, in two phases; first, structured interviews, semi-structured and informal observations collected directly from the breeders; second, interviews and personal observations on the wholesale and the retail market in Korca and stores in Tirana.

-4. Results analysis and discussion.

The "PAZA" project database, the herd size per farm in the municipality, and the subsidies policy of the Ministry of Agriculture determined our sample characterization for all the local breeders of the municipality of Vithkuq. Consequently in this municipality we considered a farm to be one of self-consumption with 1-10 sheep/goats and / or 1-4 bovine animals; medium-sized farms with 11-99 sheep / goats and / or 5-9 bovine animals; large specialized farms with more than 100 sheep / goats or more than 10 bovine animals.

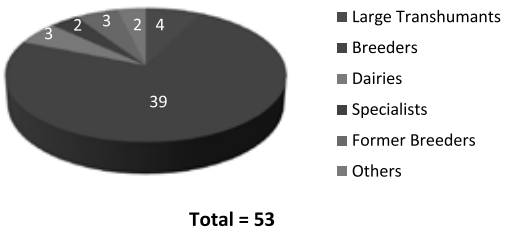

Fig 2. Sample survey (step 3)

Source: Author's field data collection

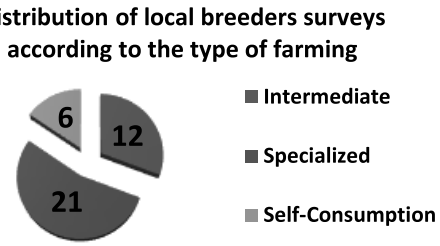

Fig 3. Distribution of local (municipality of Vithkuq) breeders surveys according to the type of farming

Source: Author's field data collection

According to the subsidies policy of the Ministry of Agriculture a large specialized farm must have more than 100 sheep or 10 cows to benefit from subsidies. This was taken in account in our sample characterization to define a large specialized farm. In the studied area (the 3 units), we identified in total 131 small subsistence farms, 142 medium-sized farms and 53 large specialized farms.

The small subsistence farms are characterized by self-consumption and very occasional or even no sale (see table 1).

Table 1. Livestock Systems of the interviewed breeders in the municipality of Vithkuq

LIVESTOCK SYSTEMS	*SH + GO + CO*	*SH + GO*	*SH + CO*	*GO*	*CO*
SELF-CONSUMPTION	0	0	3	2	1
MEDIUM-SIZED	4	3	4	0	1
LARGE SPECIALIZED	7	3	3	2	6

Source: Author's elaboration
SH = SHEEP; GO= GOATS; CO = COWS

The medium-sized farm type is a farm characterized by the self-consumption plus some sale and often has multiple other activities. In this category, some farms develop a strategy of specialization in one type of herd, with fairly consistent sales.

The large specialized farms which have specialized in one main type of animal sell the majority of their production.

4. Results

4. 1 Context of Family farming in Albania

In Albania, since the fall of communism, family farming has been a major contributor to national food security by producing food for self-consumption as well as for the market. The reconstruction of the family farming system has faced constant challenges like emigration, the very small size of farms, access to urban markets, the irrigation and drainage systems, the low standard of technologies, the weak organization of farmers, and the low development level of agrifood processing, among others, more general, like the lack of infrastructure, weak educational and medical services and the poor human and financial resources of the public administration.

In 1991, the collectivist system collapsed, the cooperative of the municipality disappeared and some massive and brutal privatization took place. In the context of the land reform (law 7501, in 1991) at the national level, each family has recovered land and some livestock heads. The distribution was not the same in all the villages, ranging from 0,1 ha to almost half a hectare per capita. Until 2000, many villages in the municipality were massively desertified. Those who remained, the most employable members, have often migrated mainly to Greece. In general, during the first decade after the fall of communism, the majority of farms underwent unimportant changes and remained within the subsistence model though some farms have slightly enlarged. Irrigation and mechanization systems were abandoned. The infrastructure of the cooperatives was largely destroyed, many wanting to recover its share of materials.

The farming system evolution depends from the pastures available in the municipality, especially during summer. Large specialized farms demand more pastures during summer which creates competition among breeders for this resource.

The use of pastures is a major resource for the breeders. In fact, during the summer, severe droughts affect the availability of grass under 1200m altitude and a vast majority of the animals go to summer pastures over 1200m. In the winter, the snow and the rigorous climate impose the feeding of the herds with forage based on grass cut over the summer. In fact, the availability of summer pastures and the quantity of forage for passing the winter are actually the main limiting factor both at individual farm level (size of each herd), and at municipal level (total number of animals).

In 2014 in Albania only 51% of the total milk produced was sold to the wholesale market which is equivalent to 530.4 tons of milk sold in 2014 in Albania or exported. Annual consumption of milk by FAOSTAT is 303.72 kg / capita in 2013. Despite the fact that milk production has increased rapidly in the recent years, opportunities for export of these products remain limited. This is due to a number of factors throughout the value chain of these products such as the lack of quality standards, appropriate technology, marketing, etc.

The current national agricultural policy subsidizes the dairy and small ruminants sectors. Subsidies for milk production are given to the farmers who deliver their milk to dairies. Support for dairy

cows and sheep is given per animal, support for transhumance of sheep is paid per farm. The subsidies are precisely 9 € per ewe/per year and 37 € per cow/per year. They are paid only to breeders with more than 100 sheep and / or more than 10 cows.

The alignment of Albania's agriculture and rural development policy with the Common Agricultural Policy demands new strategies to transform and adapt Albanian family farms to European policies, laws and standards. This transition tends to smoothly transform the fragmented structures of the agricultural sector to become competitive while protecting and valorizing local products and developing the disadvantageous territories.

4. 2 Recent evolution of the value chains of milk and meat in the municipality of Vithkuq

The municipality of Vithkuq numbers 11,500 dairy sheep out of a total of 18,549 ruminants. In fact sheep breeding is ideally adapted to the topographic and climatic conditions of the local natural resources. Breeding was practiced in the area during the communist period, and the know-how around its milk production persists today. Sheep herd represent 86% of total herds on the territory.

The population of the municipality of Vithkuq has a long history in livestock production and pasture management. It corresponds to a coherent agro-pastoral zone with a rich flora and fauna of pastures producing dairy products of high flavor and quality that are well known by local and Albanian consumers.

From the year 1997 to 2000 a severe financial and political crisis stopped the evolution of livestock production in the country. Since the year 2000 some herds have begun to really grow, boosted by the human investment returns from emigration and the support activities of some NGOs in the region. The specialization was mainly oriented towards sheep "because it's the tradition" - mentioned a young farmer who recently took over the family herd after a few years working in Greece - and because they are adapted to local systems. During the same period many pluriactive breeders, having already more or less moved in this direction, have adapted their livestock system either by reducing the importance of other activities, or by reducing their herds to free up their time (oriented to other activities).

Table 2. Evolution of the animal production in the municipality

	2005		2011	
	HEADS	PROD (Q*)	HEADS	PROD (Q)
CALVES	500	300	800	560
LAMBS	12,000	1,200	12,000	1,200
GOATS	1,500	105	1,600	128
TOTAL	14,000	1,605	14,400	1,888

Source: Source: (Çili *et al*, 2013); (Matka 2015) and author's calculation
*Q is quintals

Table 2 reflects market trends in meat production. In 2011 animal production that reached the market had increased by 18 percent compared with 2005.

The milk value chain is organized in an oligopolistic way. Only three dairies buy almost all the commercialized milk. The most important and technologically well-equipped facility is the private dairy of Vithkuq, with a processing capacity of 23 quintals of milk per day. In 2014 this dairy produced 150 quintals of white cheese and 20 quintals of cooked cheese "*Kaçkavall*". The cheese is sold directly in the city of Korca where the owner has his own shop. The two other private dairies sell the cheese in Tirana where the owners have stable commercial relations with private retail shops. One of these dairies is located in Panarit and produces only "*Kaçkavall*" (in 2014 72 quintals). Especially

Table 3. Dairies income for the year 2014

	DAIRY VITHKUQ	DAIRY LUBONJE	DAIRY PANARIT
DAIRY PROD CHEESE (Q^2)	170	100	72
DAIRY CAP[3] (Q/DAY)	23	10	7
DAIRY INCOMES EUROS /YEAR	45, 955	25,735	18,529

Source: Author's calculation
2) Q is in quintals
3) CAP is capacity

in that very remote village, the breeders suffer because of very dominant position of the owner of the dairy, who pays a very low price for the milk.

The total capacity of milk transformation into cheese of these 3 dairies is rather smaller than the ability of the local breeders to commercialize milk. Price was decreasing in constant price (see figure 4). The determinant factors of this market power are the location and the transport costs. Breeders don't have the possibility to sell their milk to other nearby dairies.

Therefore, the price is set by the buyers, who really pressure the breeders. The low price is certainly linked to the dominant position of the dairies in that area, because in other parts of Albania, the price of milk is much better and is has been increased in the same period of time (Gontard, 2016).

The meat value chain is almost totally informal and even almost illegal. The farmers can sell the animals to local slaughterhouses and butchers for better prices compared with milk (see figure 5). Milk does not always cover the production costs and meat production generates more income than milk production. The price for lambs in kg/live/weight in 2016 is lower than in 2000, but lamb production is more economically profitable for the breeders in terms of income.

There are three ways in which the lambs/calves/kids are sold: a) the breeders go to the wholesale animal market in Korca a precise day every week. This is expensive for the majority of farmers who do not have means of transport. They are forced to organize in groups and pay for conveyance. b) via the wholesale traders in the region. This way of selling animals is very usual. The coordination is done by phone and the merchant comes in person to purchase the animals on site, on a live weight basis; c) via the retail traders of Tirana. These are mostly former inhabitants of the area who buy animals in the area and who sell to the wholesale market in Tirana.

The first two ways cover 80% of total sales of animals in the area.

The value chain is totally informal and

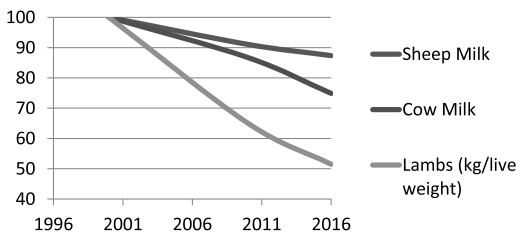

Fig 4. Constant prices of animal products in the municipality of Vithkuq between 2000 and 2016 - price index of 2000 = 100 (indexed with the annual national inflation rate)

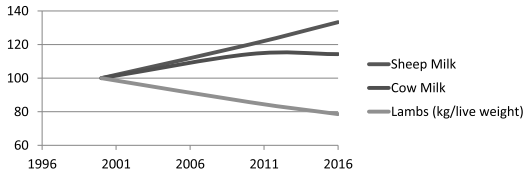

Fig 5. Current prices of animal products in the municipality of Vithkuq between 2000 and 2016- price index of 2000 = 100

Source: (Gontard, 2016)

Table 4. Pastoral dynamics of Vithkuq (326 families)

YEAR	TOT POP	HERD SIZE	TOT MILK PROD (q)	TOT MEAT PROD (q)
2005	2,939	17,920	27,500	1,605
2014	1,660	18,549	25,200	2,497
Diff in %	-56%	+4%	-9%	+55

Source: (Çili *et al*, 2013); (Matka 2015) and author's calculation
TOT =Total PROD=Production

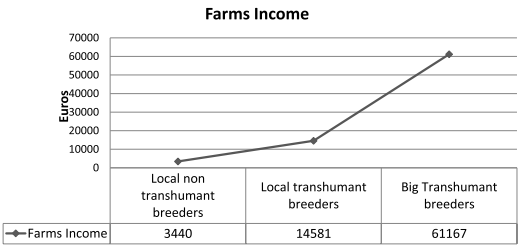

Fig 6. Farms incomes for three types of farms in 2016

Source: (Gontard, 2016)

transactions are executed without contract or invoice. According to the legal provisions, animals must be slaughtered in specific slaughterhouses. There is only one public slaughterhouse in the region which works at low capacity because nobody forces traders and butchers to slaughter the animals according to the law. Therefore, the food safety standards are not met, the value chain is poorly organized and the possibility to buy and the prices are very unstable.

With regards to the influence of these two value chains' structure on the evolution of production in the territory; it is worth noting that in 2014, the total milk production had decreased by 9% compared with 2005 while the meat production had increased by 55%. This trend is clearly linked to the extremely low price of milk, which does not always cover the production costs (see table 4 and figure 4)

According to the sample characterization we have calculated the incomes for three categories of farms.

For the first category, we calculated the income for a typical self-consumption farm which does not do transhumance. For the second category we calculated the income for a typical medium-sized farm which does transhumance and for the third category, we calculated the income for a typical capitalist large specialized farm. This type of farm was identified this year in the territory because they have large herds which graze on the summer pastures of the Municipality.

In figure 6 we can see the big difference in incomes between a local transhumant breeder having a medium size farm and a big transhumant breeder. This can be explained by two reasons:
(1) the herd size of the first breeder is between 300-400 sheep and for the second between 700-1000. (2) they have different strategies in terms of meat production. The local transhumant breeder has a double orientation milk/meat but the big transhumant breeder has purely a meat orientation strategy.

4. 3 Pastures management

The municipality of Vithkuq has 5,350 ha of summer pastures over 1200 m. They are spread over the whole territory. For breeders, access to summer pastures is really key for their survival and their capacity to invest. Three ways of managing pastures exist. (1) Private pastures: The majority of private pastures are owned by local breeders, who may use and cultivate these pastures. More than 1000 ha summer pastures are owned by a unique very large private owner (descendant from the "*bey*" (ottoman honor title of land owners during the Ottoman Empire regime in Albania: 1463-1912). This property right was given to this owner during the first decade after the fall of communism in 1991.

(2) Communal pastures: Common pastures managed by each village: these communal pastures

are historically and traditionally managed by the villagers, who consider themselves the legitimate users of this resource. The villagers don't pay for these pastures. The spring and autumn pastures belong to this category, and the pastures exploited by the breeders of one village correspond to the administrative boundaries of the same village. The small and medium-sized breeders have a farming system with sedentary herds. They benefit from the departure of large farmers to access all communal pastures throughout the summer. Their animals return every night to their barns.

(3) State pastures: the Albanian State still owns and manages some parts of the pastures in the municipality. Vithkuq has 1250 ha state summer pastures that are mainly far away from the villages. The Departments of Forests and Pastures of the Ministry of Environment set the price and distribute the pastures to the breeders. These pastures are expected to be distributed in order of priority to the local breeders who need to pay for them.

Recently, the large and specialized local breeders have been in competition with "big" transhumants coming from Vlora, Tepelena and Delvina (Southern Albania) over the state summer pastures.

The private summer pastures, according to historical data, were always used by the big transhumants coming from southern Albania. They usually pay for the totality of the summer pastures owned by the "*bey*" because their herds are between 500-1500 sheep.

With the new territorial reform in 2016 the status of pastures is changing right now. The communal and state pastures will be public pastures and should be allocated on priority basis to local breeders. Only if the local breeders are not willing to pay to access the pastures, will the public authorities of the Region offer the land to breeders from outside the municipality.

To sum up: all public pastures will be managed by the public authorities of the Region of Korca and the unique very large private owner (descendant from the "*bey*") will be the only manager of the private pastures. Therefore, local breeders will need to pay for the communal pastures which were free to access before the reform.

The impact of this change could be profitable to the quality of pasture management. For the local transhumant breeders this change can be an incentive to invest in bigger herds and could be a way to organize them and work together. If local breeders have to organize themselves together to rent pastures, this could be a first step in the creation of cooperatives or organization to promote their products together.

With the reform, more pastures should be available to transhumant breeders since some communal pastures, reserved for villagers, were undergrazed.

But some challenges were identified as well during the interviews:

For the non-transhumant local breeders the reform could be complicated, they will have to be organized to rent all parcels of pastures used before as commons. In the villages where this is not possible, "big" transhumants or other transhumants coming from the region may use them. This year only one village has done this. Breeders of this village have chosen the chief of village to represent them and he can rent the public pastures that were communal pastures belonging to the village before the reform.

For the "big" transhumants the challenge will be to obtain the same state pastures they had obtained before the reform. Public pastures will be allocated with priority to local transhumant breeders. This can be an opportunity for them to federate in associations and build new strategies for valorizing their animal products.

5. Conclusion

The municipality of Vithkuq is a mountainous territory with a long tradition and know-how, especially in livestock farming systems.

The family farming model is adapted to the topographic and climatic conditions of the environment but also to the new current dynamics of the urban markets. The farming system has evolved and adapted to the governmental structural changes that occurred during the transition period. Indeed, breeders specialize according to their physical abilities for livestock production, the availability of the young labor force and the economical and physical environment in which they are located.

Our research shows that this territory has suffered from a desertification of the population after the fall of communism in 1991. The reduction of the population has been accompanied by a recent sharp increase in herd size and new dynamics in the local production systems. Livestock breeding, as a tradition and know-how, remains an important economic source for people in this marginalized territory.

Market demand for animal products, especially for meat, has increased sharply in recent years. Products "Origin Vithkuq" are highly demanded by the market despite the fact that they have no logo or other brand. The demand for these local products explains the expansion of herds in the area and many farmers see the need to produce in large quantities to flourish economically.

Mountain pastures are an important resource for the breeders of Vithkuq. The exploitation of this resource is a major challenge for the management of both farming systems and the landscape. The large specialized farms need to respect the governmental rules to benefit from the subsidy policy. The medium-size farms are adapting their herds to benefit from public support.

Recently, the dynamics of expansion and specialization have involved the reorganization of the pastoral space. This has created an increasing demand for greater pastures that are managed in an unclear way, generating conflict between the local farmers and the “big” transhumants who obtain contracts to exploit this resource during summer. Although farmers have increased their herd size, they do not really have a favorable bargaining power with the dairies. The bargaining power in the milk and meat value chains is asymmetric and the current dynamics of the value chain do not position the products in a niche market capable of engaging a virtuous circle for the good remuneration of the producers and for the reproduction of the natural resources.

6. Suggestions

The chaotic economic transition of the Albanian mountainous territories nowadays demands new strategies in terms of rural development. The Municipality of Vithkuq in particular needs a lot of adjustments and structural changes to support the local breeders. Indeed, the need for agricultural development and pasture management strategies are numerous.

From the value chain perspective, the adjustments needed to upgrade to reach the European standards regarding food quality and safety is high. The milk and the meat sectors worth the development because the taste and flavor of the cheeses and the meat produced in that mountainous area are well-known and meet the expectations of the Albanian consumers as well on the urban markets. These consumers have a high preference for the local milk and meat products but the safety food standards and quality labels still remain rare.

At the international level the needs for investing in facilities respecting modern technology, and the

enforcement of existing regulations regarding food safety are key to stabilizing access to the urban markets under the European Union legal regime.

Access to markets will be profitable to the family farms if there is enough competition within the value chain in order for the breeders to obtain fair prices that compensate them for costs of production. Those costs are quite high due to the natural conditions of a rigorous climate and harsh slopes that are typical in all mountainous area.

If the products are well priced, an increase in production will follow, with the consolidation of medium-sized to large farms, able to invest in better buildings and to modernize their facilities. If these farms can increase their production capacities they will be able to benefit from public support such as subsidies.

But the increase in herds needs to be accompanied by a common management strategy of the pastures. This will depend not only on the ability of the regional authorities to effectively implement the recent reform of State and common land management but also on the collective action of local breeders to cooperate for a successful management strategy of their pastures.

Notes

1）http://paza-albania.eu/web/PAZA_Project_1_1.php

References

Bernard C., Lerin F., Crouteix O., Lopez R. (2014) Forests and pastures' devolution process in Albania: a sustainable management of Mediterranean commons? Montpellier (France) : CIHEAM-IAMM. 31 p. + 33 p. Inception Study on Communal Forestry in Albania, 2013/12/04, Tirana (Albanie). Versions anglaise et albanaise. Projet BiodivBalkans : Biodiversity Conservation & Sustainable Rural Development in Balkan Mountain. CIHEAM IAMM / MADA / FFEM.

Bombaj, F., Barjolle, D., Lerin, F., Michaud, G. (2015) Territoires sous forte contrainte en Albanie. Quelles conditions de l'action collective pour activer et valoriser les ressources territoriales spécifiques porteuse de développement? 52ème Colloque ASRDLF, Montpellier 7-9 juillet.

Cochet, H. (2011) Origine et actualité du "Système agraire": Retour sur un concept. (A. Collin, Éd.) Revue Tiers Monde, 3(207), 97-114.

Crowley E. (2013) With appropriate support family farming can contribute to the future of sustainable rural development. Rural 21–The International Journal for Rural Development. www.rural21.com/english/ points-of-view/detail/article/family-farming-the-backbone-of-sustainable-rural-development-0000794

Çili A., Caca J., Toska K., Kondura K. (2013) Studimi teknikoekonomik i fermave blegtorale te bagetive te imeta ne qarqet Korçe, Shkoder, Diber dhe Kukes dhe propozime politikeberje per zhvillim te qendrueshem te tyre. QTTB, Korce, 76 pg.

FAO (2013) Current Worldwide Annual Meat Consumption per capita, Livestock and Fish Primary Equivalent, Food and Agriculture Organization of the United Nations, viewed 21st September, 2016 http://faostat.fao.org/site/610/DesktopDefault.aspx?PageID=610#ancor

Garnier, A. (2013) Analyse descriptive d'un terroir du nord de l'Albanie : le Has Systèmes d'élevage et ressources pastorales. Mémoire (Master 2 GAT) : CIHEAM-IAMM, Montpellier (France). 76 p. Mémoire Master 2 Recherche. Ingénierie et Gestion des Territoires [IGT]. Parcours : Gestion Agricole et Territoires [GAT]. Cohabilitation Université Montpellier III, CIHEAM-IAMM.

Gontard S., (2016) Diagnostic agraire du massif pastoral de Rrungaja. Région de Korçë-Sud-Est de l'Albanie. Mise en valeur des pâturages-principale ressource de ces territoires de montagnes-par les systèmes d'élevage. AgroParisTech, Paris (France). 79p. Mémoire Master fin d'études.

Lerin, F., Marku, S. (2010) Mobilités spatiales et développement en Albanie : enseignement de la transition post-communiste et enjeux d'avenir. 17 p. 4. Conférence internationale de Démographie des Balkans, 2010/05/13-15, Budva (Monténégro). Communication écrite. Session 5: enjeux et défis pour l' aménagement.

(MAFCP) Ministry of Agriculture, Food and Consumer Protection (2014) Statistical Yearbook, 2014 [in Albanian].

Manoli, C., Ickowicz, A., Josien, E., & Debieu, B. (2011). Comment caractériser les relations entre élevage et territoire? Une revue de la diversité des approches existant dans la littérature. Rencontres Recherches Ruminants, 361-368.

Matka., P. (2015) Annual census of the livestock production in the municipality of Vithkuq.

Peeters, A. (2009) Importance, evolution, environmental impact and future challenges of grasslands and grassland-based systems in Europe. Grassland Science, 55(3), 113-125.

Thirion M.C. (ed.), Bosc P.M. (ed.), Bélières J.F., Bonnal P., Bosc P.M., Losch B., Marzin J., Sourisseau J.M.. (2015) Family Farming around the World: Definitions, contributions and public policies. Paris: AFD, CIRAD, 186 p. *A Savoir*, 28.

Varotto, M., & Lodatti, L. (2014) New Family Farmers for Abandoned Lands: The Adoption of Terraces in the Italian Alps (Brenta Valley). Mountain Research and Development, 34 (4), 315-325.

Wymann von Dach, S., Romeo, R., Vita, A., Wurzinger, M., & Kohler, T. (2013) Mountain Farming Is Family Farm-ing: A contribution from mountain areas to the International Year of Family Farming 2014. Rome, Italy: FAO, CDE, BOKU, 100.